



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,443	08/23/2001	John K. Roberts	GEN10 P-338A	9576

28469 7590 09/17/2003

PRICE, HENEVELD, COOPER, DEWITT, & LITTON
695 KENMOOR, S.E.
P O BOX 2567
GRAND RAPIDS, MI 49501

EXAMINER

FOURSON III, GEORGE R

ART UNIT	PAPER NUMBER
----------	--------------

2823

DATE MAILED: 09/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/935,443

Applicant(s)

ROBERTS ET AL.

Examiner

George Fourson

Art Unit

2823

A

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 2, the use of "thermally resistive" renders the claims indefinite. If applicant intends a particular range of thermal resistance or relative magnitude of thermal resistance with respect to another material it must be clearly recited.

In claim 1, lines 7 and 8, it appears that the claim should be amended to read "at least one of the electrical connection points and the at least one lead" unless another step is intended.

In claims 5,6,9,10,12,13,15,17,18 and 19 it appears that - - element - - should replace "members" to provide proper antecedent basis.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6,8-15 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Lerner et al and Ogino et al.

Ogino et al discloses mounting of semiconductor light emitting device 1 on a lead frame comprising thermally conductive heat extraction element 3, element 3 having fins 3a protruding from optically transparent resin 5 and lead 4a connected to the lead frame. The device 1 is contacted through the mounting plate 2/3 and a wire connected to lead 4b. Plate 2/3 has a greater thickness in the direction normal to heat transfer through heat extraction element 3 including fins 3a. The reference does not disclose that the leads 4a and 4b are connected by tie bars which are broken as recited.

Lerner et al discloses mounting of a semiconductor device on a heat extraction member 222, attaching wires to the device and leads 221a, encapsulating the device and leads and cutting the tie bars 221 to electrically isolate the leads (col.1, lines 50+).

It would have been within the scope of one of ordinary skill in the art to combine the teachings of Lerner et al and Ogino et al to enable the electrically isolated leads 4a/4b of Ogino et al to be formed.

Claims 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Lerner et al and Ogino et al as applied to claims 1-6,8-15 and 17-19 above, and further in view of Simmons.

Lerner et al and Ogino et al fail to disclose formation of the shape recited in claim 7 and stamping the lead frame as recited in claim 16.

Simmons discloses stamping to produce the lead frame of figure 2 having tie bar 18 wherein the lead frame has a recess on which the device is mounted.

It would have been within the scope of one of ordinary skill in the art to combine the teachings of Lerner et al and Ogino et al with those of Simmons et al to enable the lead frame of the combination of Lerner et al and Ogino et al to be formed.

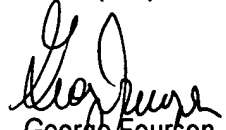
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 308-0956. See MPEP 203.08.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner George Fourson whose telephone number is (703) 308-2544. The examiner can normally be reached on Monday through Friday.

Art Unit: 2823

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri, can be reached on (703) 306-2794. The fax number for this group is (703)308-7722 (or extensions 7724, 3431 or 3432) for regular communications and (703)308-7382 for after final communications.



George Fourson
Primary Examiner
Art Unit 2823

GFourson
September 7, 2003